

NEW HYMENOPTERA FROM NORTH AMERICA.

By A. B. GAHAN,

Of the Bureau of Entomology, United States Department of Agriculture.

With a single exception, the following Hymenoptera were bred by the Cereal and Forage Insect Division of the United States Department of Agriculture, Bureau of Entomology. The single exception is that of an interesting new genus and species of Proctotrypoidea parasitic in the eggs of the Chinch Bug and reared by J. W. McCulloch, of the Kansas Agricultural Experiment Station.

Superfamily VESPOIDEA.

Family ELIIDÆ.

Genus ELIS Fabricius.

The following described species runs to the genus *Plesia* in Doctor Ashmead's classification of the Myzinidæ.¹ According to Mr. Rohwer, *Plesia* Jurine is a synonym of *Elis* Fabricius.²

ELIS ATRIVENTRIS, new species.

Female.—Length 20 mm. Agrees with the description of (*Meria*) *Elis collaris* Say, except as follows: The two yellow spots above the base of the antennæ are confluent with the frontal orbital lines; the yellow band on the posterior margin of the prothorax is not interrupted; there is a large yellow spot between the notauli on the mesonotum and a smaller one on the scutellum, the venter is immaculate black.

Head, prothorax, mesonotum, mesoscutellum, and mesopleuræ with large deep punctures; propleuræ and metapleuræ lineated, the latter more coarsely so; propodeum without punctures or rugæ of any kind.

Male.—Differs from the female in the usual sexual characters, and also as follows: The clypeus is entirely yellow; two yellow spots at base of antennæ are not confluent with the frontal orbital lines; line

¹ Can. Ent., vol. 35, 1903, p. 5.

² Proc. U. S. Nat. Mus., vol. 40, p. 551.

behind the eyes absent; two spots of yellow on the mesopleuræ, an anterior one and a smaller posterior; dorsal segments 1 to 6 of the abdomen with uninterrupted apical bands of yellow and the seventh segment with a spot each side; ventral segments 2 to 6 laterally at apex with a spot of yellow; intermediate and posterior knees, tibiæ, and tarsi yellow like the anterior, instead of ferruginous, as in the female; propodeum coarsely punctate.

A female paratype is smaller than the type and differs from it in having the spots on the second abdominal segment more widely separated. The male agrees very well with the description of (*Tiphia*) *Elis maculata* Fabricius.

Type-locality.—Elkpoint, South Dakota.

Type.—Cat. No. 16349, U.S.N.M.

Host.—*Lachnosterna*, sp.

Two female and one male specimen reared by C. N. Ainslie and recorded in the Department of Agriculture, Bureau of Entomology, under Webster No. 8860.

Superfamily ICHNEUMONOIDEA.

Family BRACONIDÆ.

Subfamily BRACONINÆ.

BRACON (TROPIDOBRACON) MEROMYZÆ, new species.

Female.—Length 2.5 mm. to 3 mm. Antennæ about as long as the whole body, 31-jointed in the type; face below antennæ with some minute indistinct punctures laterally; otherwise the head and thorax except the propodeum, smooth and polished; parapsidal grooves complete; propodeum with a prominent median longitudinal carina, mostly smooth, but with a narrow aciculate area either side of the median carina and the lateral margins more or less aciculate-punctate. Wings slightly fuscous, the first abscissa of radius oblique and equal to half the second abscissa; radial cell extending to the wing apex; second cubital cell narrow and elongate; abdomen as long as the thorax; first dorsal abdominal plate rugose, longer than wide, with a deep fovea medially at base, the apical middle prominent, and a smaller smooth fovea at each lateral posterior angle connected with the basal fovea by oblique furrows; dorsal segments 2 and 3 finely rugulose, 3 and 4 more faintly so, the following segments smooth; ovipositor exerted one-third the length of the abdomen. Head, antennæ, mandibles at apices, thorax, and first dorsal abdominal plate black; median spot on the second segment corresponding somewhat to the first dorsal plate and a median streak varying in width on the following segments blackish; mouth parts and apical portions of cheeks, the legs, including coxæ, tegulæ, all of the venter, and the dorsal segments of the abdomen, except as stated, bright honey-

yellow; ovipositor one-third the length of the abdomen and black. Wing veins and stigma blackish brown.

Male.—Differs from the female only in having the underside of scape and pedicel slightly testaceous, the abdomen narrower, its dorsum less obviously streaked with black in the middle.

Type-locality.—Elkpoint, South Dakota.

Type.—Cat. No. 16350, U.S.N.M.

Host.—*Meromyza americana*.

Three male and three female specimens from the type-locality reared by C. N. Ainslie from the above-mentioned host and recorded under Webster No. 8840, Bureau of Entomology, United States Department of Agriculture. Also one male specimen reared by J. A. Hyslop at Hagerstown, Maryland, from the same host, and recorded under Webster No. 5967. In the collection of the United States National Museum is one specimen labeled "*Bracon meromyzæ*" in Ashmead's handwriting, and bearing the following data: "Par. on *Meromyza americana*; Ames, Iowa, Oct. 14, 1891." The name, however, does not appear to have been used in literature.

The species is separated from *gastroidæ* Ashmead by the rugulose dorsal segments of the abdomen.

Subfamily EUPHORINÆ.

EUPHORIANA, new genus.

Apparently most closely related to the genus *Euphorus* Nees, from which it differs by having the cubital, discoidal, and anal veins as well as the cubital crossveins and recurrent nervure entirely effaced, the forewing without cubital and discoidal cells; the median nervure is also effaced or very indistinct; the radial cell is cultriform, narrow, the first abscissa of radius obsolete or punctiform; the second and third abdominal segments not separated and extending almost to the apex of the abdomen.

Head from above subquadrate, a little wider than long, the temples as broad or broader than the eyes and only slightly rounded; face below the antennæ sharply truncate; prothorax prominent; meso-scutum with faint parapsidal grooves; abdominal petiole about thrice as long as wide at the apex, gradually widening from base to apex; abdomen pyriform, the ovipositor concealed or very slightly exerted.

Type of the genus.—*Euphoriana uniformis*, new species.

EUPHORIANA UNIFORMIS, new species.

Plate 39, fig. 1.

Male.—Length 1.8 mm. Color pale reddish yellow, with the apical half of the antennæ and the apical half of the abdomen slightly fuscous. Vertex, frons, occiput, and temples polished; the vertex

and frons with a few widely-scattered round shallow punctures; face below the antennæ with close shallow punctures and densely covered with fine hairs; mandibles edentate; clypeus transverse and polished; antennæ short, 16-jointed, the first and second flagellar joints subequal and a little the longest of the flagellar joints. Prothorax above and at sides closely punctate; mesoscutum polished, with a few indistinct shallow punctures posteriorly, the parapsidal grooves uniting before reaching the scutellum; mesopleuræ mostly smooth, with a punctate area medially; propodeum evenly rugoso-punctate without carinæ; wings slightly fuscous, with a transverse hyaline streak across the middle and embracing the basal half of the stigma; posterior tarsi longer than their tibiæ, the first tarsal joint as long as the three following, or nearly as long. Abdominal petiole longitudinally striate, the following segments smooth.

Female.—Similar to the male, but with the antennæ 15-jointed, and the body color slightly more ferruginous.

Type-locality.—Hagerstown, Maryland.

Type.—Cat. No. 16351, U.S.N.M.

Host.—*Meromyza americana*.

The male type was reared by J. A. Hyslop from the above-mentioned host and locality, July 18, 1912, and is recorded under Webster No. 5967, Bureau of Entomology, United States Department of Agriculture.

The female type collected at Garden City, Kansas, by W. H. Menke, July, 1896.

Family ALYSIIDÆ.

Subfamily DACNUSINÆ.

CÆLINIDEA FERRUGINEA, new species.

Female.—Length 3.5 mm. Agrees with *C. meromyzæ* Forbes in sculpture, but differs as follows: Abscissa of cubitus separating the first cubital and discoidal cells usually incomplete, effaced basally; the head viewed laterally appears distinctly longer (antero-posteriorly) than high (dorso-ventrally), while in *meromyzæ* it is only a little longer than high; the parapsidal grooves are deep and complete, not interrupted on the disk of the mesonotum. General color of the whole insect flavo-ferruginous; the color of the thorax variable, often mixed with brownish or even blackish on the dorsum, pleuræ, and propodeum; apical two-thirds of the antennæ and apical half of the abdomen dark brown or blackish.

Male.—Similar to the female, but with the antennæ, legs, and thorax darker.

Type-locality.—Elkpoint, South Dakota.

Type.—Cat. No. 16352, U.S.N.M.

Host.—*Meromyza americana*.

Three specimens (two females and one male) from the type-locality, reared by C. N. Ainslie and recorded under Webster No. 8840, Bureau of Entomology, United States Department of Agriculture; also four specimens in the United States National Museum, labeled, "273° Par. on *Meromyza americana*, James Fletcher, Col. at Ottawa, July 21, 1899".

Superfamily CHALCIDOIDEA.

Family PTEROMALIDÆ.

Subfamily PTEROMALINÆ.

PTEROMALUS EURYMI, new species.

Female.—Compared with *P. puparum*, this species is larger, more robust, the abdomen short ovate, very slightly conical, not as long as the thorax, its first dorsal segment comprising half its total length and the legs, except their coxæ, reddish testaceous

Head distinctly wider than the thorax, strongly and closely punctate, the clypeal area aciculate-striate; seen from above, the head is distinctly more than three times as broad as long, the occiput a little concave, the ocell-ocular and postocellar lines nearly equal. Thorax punctured like the head, except that the punctures on the dorsal aspect of the prothorax are distinctly coarser; apical one-fourth of the mesoscutellum with a slightly different sculpture from the remainder, the line of demarcation appearing as an indistinct transverse furrow before the apex; propodeum without median carina, but with the lateral folds very distinct, strongly punctate, except the region outside the spiracular sulci, which is more faintly sculptured and somewhat shining; neck of the propodeum about half the length of the hind coxæ, the punctures of the dorsal surface larger and not as deep as those on the rest of the propodeum. Wings hyaline, the venation typical. Abdomen smooth and polished, broader than the thorax, and only slightly longer than broad.

Color aeneous; face below antennæ blackish; scape, mandibles, and legs, except coxæ, testaceous; the apical tarsal joints brownish; antennal pedicel and flagellum brownish black; all coxæ concolorous with the thorax; base of first dorsal segment brassy, remainder of the first segment and the venter metallic blue-green, dorsal segments beyond the first blackish in some lights.

Male.—Similar to the female in sculpture, but much more highly metallic in color and with the antennal pedicel and flagellum testaceous, like the scape.

Type-locality.—Tempe, Arizona.

Type.—Cat. No. 16353, U.S.N.M.

Host.—*Eurymus eurytheme*.

Described from a large number of specimens reared from the above-named host by V. L. Wildermuth and recorded under Webster No. 7222 of the Bureau of Entomology, United States Department of Agriculture.

DIBRACHYS METEORI, new species.

Female.—Length, 2.5 mm. Head and thorax dark aeneous, nearly black in some lights, reticulate-punctate; the punctures of the thorax deeper than those of the head; clypeus slightly concave on the anterior margin medially, the lateral angles appearing as two very short obtuse teeth; mandibles both four-dentate; cheeks opposite base of mandibles with a broad depression extending laterally and upward half way to the lower extremity of the eye; occiput margined as in *D. boucheanus*; postocellar line one-third longer than the ocell-ocular line; antennal scape and pedicel blackish, the flagellum brownish testaceous, pedicel distinctly shorter than the first funicle joint, first ring-joint transverse, the second very slightly longer than broad, first funicle joint the longest of the funicle joints, following funicle joints longer than broad, except the sixth, which is nearly quadrate; club 3-jointed and somewhat longer than the two preceding joints of the funicle. Punctures of the mesonotum not so deep on the lateral lobes as medially and on the scutellum; scutellum about as long as the mesoscutum; propodeum with a slight median carina, the spiracular sulci and lateral folds present and distinct, surface of the propodeum within the lateral folds distinctly and very finely punctate, the region between the folds and spiracular sulci with shallow reticulate sculpture, beyond the sulci to the lateral margins smooth; spiracles large and long-oval. Wings hyaline, the marginal vein only slightly longer than the postmarginal, the stigmal and postmarginal subequal. All coxæ, trochanters, and femoræ, except the apices of latter, black; median and posterior tibiæ medially and two or three apical joints of all tarsi brownish-black; apices of all femoræ, most of the front tibiæ, bases and apices of median and posterior tibiæ, and basal joint of all tarsi pale yellowish. Abdomen conic ovate, slightly longer than the thorax, smooth, shining, metallic green.

Male.—The antennæ are longer than in the female; pedicel very short, scarcely longer than broad; ring joints both transverse; funicle joints elongate, 1 to 5 being at least twice as long as broad, the sixth a little shorter, but considerably longer than broad. The depression at base of mandibles is shorter than in the female, the postmarginal vein is slightly longer than the stigmal, and the median and hind tibiæ are slightly lighter than in the female. Color as in the female.

Type-locality.—Brownsville, Texas.

Type.—Cat. No. 16354, U.S.N.M.

Host.—*Meteorus* infesting *Laphygma frugiperda*.

Described from 14 specimens, 12 females and 2 males, reared by E. G. Smythe from the above-mentioned host and recorded under Webster No. 6446, Bureau of Entomology, United States Department of Agriculture; also two specimens from Memphis, Tennessee, recorded under Webster No. 9600.

This species differs in some respects from the type species of *Dibrachys*, and should perhaps form a new genus. It runs to *Dibrachys* in Mr. Kourдумoff's recently published revision of the subfamily Pteromalinae,¹ however, and for the present is placed in that genus, where it should be easily recognized by the characters of clypeus and cheeks.

Family ENCYRTIDÆ.

Subfamily EUPELMINÆ.

EUPELMINUS METEORI, new species.

Female.—Length 2.8 mm. Head above shining with fine, irregular, transverse wrinkles above the ocelli, the sculpture becoming slightly fainter and more reticulate on the frons; temples and cheeks strongly aciculate-punctate, and the face from upper angle of the scrobes downward rather coarsely rugoso-punctate, the area within the scrobes and below more finely so; eyes bare. Antennæ 13-jointed, clavate; scape not attaining the anterior ocellus; ring-joint slightly longer than broad; first funicle joint twice as long as the ring-joint and about equal to the pedicel, the second equal to or a little longer than the first, broadening slightly to the apex, the following funicle joints shorter and thickening gradually; club compressed, slightly longer than the two preceding funicle joints combined, the sutures more or less oblique; maxillary palpi short and somewhat flattened toward apex. Mesoscutum hollowed out, the median lobe very narrow, almost linear and less than two-thirds the length of the mesoscutum, lateral lobes elevated, their lateral margins sharp and their inner faces faintly wrinkled and shining; scutellum as long or a little longer than the median lobes of the mesoscutellum and forming a high, sharp, smooth ridge; pleuræ and mesosternum with fine, more or less reticulate sculpture, the lines becoming deep striations along the dorso-posterior margin. Wings reduced to small scale-like appendages which do not extend beyond the apex of the propodeum. Abdomen about as long as the thorax, convex above, slightly compressed from the sides, the segments above and below finely reticulated; ovipositor exerted one-third the length of the abdomen.

Head dark above, the face, cheeks, and temples with strong brassy reflections; apices of mandibles, palpi, antennal pedicel, and flagellum black; scape, thorax, legs, and first dorsal abdominal segment reddish

¹ Revue Russe d'Entomologie, vol. 13, 1913, p. 2.

testaceous, the color of the thorax more or less mixed with brownish, abdomen beyond the first segment black; ovipositor sheaths black at base and apex, with a broad yellowish band between.

Type-locality.—Brownsville, Texas.

Type.—Cat. No. 16355, U.S.N.M.

Host.—*Meteorus* infesting *Laphygma frugiperda*.

Five specimens reared by E. G. Smythe and recorded under Webster No. 6446, Bureau of Entomology, United States Department of Agriculture.

Family ELASMIDÆ.

ELASMUS APANTELI, new species.

Plate 39, fig. 2.

Female.—Length 2 mm. Antennæ rather short, with pedicel and funicle joints subequal, the club compressed and shorter than the funicle. Face with large round punctures on frons, vertex, and along orbits, each puncture distinct and separate, the intervening surface smooth; facial impression distinct, not margined above, the surface within the impression, as well as the clypeus and cheeks, without punctures; occiput finely wrinkled.

Pronotum and mesoscutum covered with long recumbent hairs, beneath which the surface appears shining and slightly scaly; mesoscutellum shining, but under strong magnification finely marked with wavy lines; postscutellum triangular, the apex acute; pleuræ, and outer surfaces of all coxæ, and femoræ with fine aciculate lines. Abdomen smooth and polished, as long as the head and thorax together. Wings hyaline, densely pubescent. Spines on the dorsal margin of the posterior tibiæ arranged so as to form a double row of diamond-shaped cells, the inner row consisting of three cells and the outer of four; middle and anterior tibiæ outwardly with a row of similar spines along each margin, which on the median legs continue as parallel lines to the apex of the second tarsal joint.

General color black, with a bluish metallic tinge on head and thorax above; antennal flagellum brownish; postscutellum conspicuously yellowish-white; all trochanters, apical third of anterior femoræ, extreme apex of median femoræ, all tibiæ, and more or less of all tarsi white, the color of the latter obscured by blackish hairs; first two ventral segments of the abdomen more or less yellowish.

Type-locality.—Memphis, Tennessee.

Type.—Cat. No. 16356, U.S.N.M.

Host.—*Apanteles harnedi* Viereck.

Described from two specimens reared from cocoons of the above-mentioned host by W. P. McConnell and recorded under Webster No. 9600, United States Department of Agriculture, Bureau of Entomology.

Family EULOPHIDÆ.

Subfamily TETRASTICHINÆ.

TETRASTICHUS BRUCOPHAGI, new species.

Female.—Length 1.8 mm. Antennal pedicel and the three funicle joints subequal in length, the club about as long as the two last funicle joints combined; head not wider than the thorax; malar space long, equaling or nearly equaling the height of the eyes; whole head finely lineolated with a few round punctures on the cheeks; prothorax finely punctured; mesoscutum and scutellum finely lineolated, the parapsidal grooves deep and broad, the median line of the mesoscutum distinct but fine; two longitudinal grooves on the mesoscutellum very distinct, the distance between them not equal to half the length of the scutellum; metanotum about half as long as the propodeum and faintly sculptured; propodeum with faint subreticulate sculpture similar to that of the metanotum, the median carina distinct; abdomen conic ovate, as long as head and thorax.

Color dark blue-green; antennæ very dark brownish, the apex of scape below, and underside of pedicel paler; all coxæ, trochanters, and femoræ greenish black; apices of all femoræ, all tibiæ, and the tarsi, except apical joint, pale yellow.

Male.—Similar to the female except for secondary sexual characters.

Type-locality.—Corcoran, California.

Type.—Cat. No. 16357, U.S.N.M.

Host.—*Bruchophagus*, sp. from alfalfa seed.

Thirty specimens from the type-locality, reared by T. D. Urbahns and recorded under Webster No. 6712, Bureau of Entomology, United States Department of Agriculture. Eight specimens also reared by Mr. Urbahns, labeled, "Tulare County, California," and recorded under Webster No. 6045.

TETRASTICHUS (TETRASTICHODES) DETRIMENTOSUS, new species.

Female.—Length 1.5 mm. Face and occiput very finely lineolated; antennæ 9-jointed with a ring-joint which is visible only when mounted in balsam and under high magnification, the three funicle joints subequal and each slightly longer than the pedicel; club broader than the funicle and about as long as the two preceding funicle joints, its third joint small. Prothorax punctate; mesoscutum finely lineolated without a median longitudinal grooved line, the parapsidal furrows deeply impressed; lineolation of the scutellum very faint, the two longitudinal grooved lines distinct; propodeum smooth, with a distinct median longitudinal carina; prepectus faintly reticulated, the remainder of pleuræ smooth. Abdomen about as long as the head and thorax, pointed-ovate, and practically smooth,

though with very obscure reticulate lines under high magnification. Wings hyaline; the stigmal vein slightly clavate, with a distinct short uncus above the apex.

Color dark aceneous, nearly black; antennal scape pale; pedicel and flagellum brownish black; all femoræ black; apices of all femoræ, all tibiæ, and tarsi pale yellowish.

Male.—Antennal scape shorter than in the female, slightly swollen and black; antennal ring-joint prominent, about as long as wide, first flagellar joint longer than the pedicel (antennæ broken off at the second flagellar joint); abdomen shorter and narrower than the thorax; otherwise the male differs from the female only in the usual sexual characters.

Type-locality.—Lakeland, Florida.

Type.—Cat. No. 16358, U.S.N.M.

Host.—*Coccinella sanguinea*.

Twenty specimens from the type-locality reared by G. G. Ainslie and recorded under Webster No. 5252 I, Bureau of Entomology, United States Department of Agriculture.

Subfamily EULOPHINÆ.

SYMPIESIS AGROMYZÆ, new species.

Female.—Length 1.6 mm. to 2 mm. Head bluish, with some slight brassy reflections; thorax bright brassy-green; antennæ blackish, the scape pale at base; legs, including all coxæ, pale yellowish, the apical tarsal joints brownish; wings hyaline and rather thickly ciliated; abdomen bluish or brownish black, often more or less testaceous basally above and below.

Funicle joints 1 and 2 subequal, more than twice as long as the pedicel and slightly longer than joints 3 and 4 of the funicle; club one and a half times the length of the last funicle joint; occiput with very faint reticulate sculpture, the rest of the head smooth and polished; clypeal region sometimes very faintly sculptured. Thorax shining; the prothorax and mesoscutum sparsely covered with long hairs, with faint scale-like sculpture, less pronounced on the lateral lobes of the latter; mesoscutellum with much more distinct reticulate sculpture; metanotum nearly smooth; propodeum perfectly smooth, with a short but distinct neck and highly polished, with very distinct median and lateral carinæ and a transverse carina before the apex; marginal vein distinctly longer than the postmarginal, the latter about two and a half times as long as the stigmal, which is clavate, with a short but distinct uncus above and before the apex. Abdomen smooth, polished, as long as the head and thorax or slightly shorter, and with a short but distinct petiole.

Type-locality.—Lakeland, Florida.

Type.—Cat. No. 16359, U.S.N.M.

Host.—*Agromyza parvicornis*.

Three specimens from the type-locality reared by G. G. Ainslie and recorded under Webster No. 7599 A F, Bureau of Entomology, United States Department of Agriculture.

Family MYMARIDÆ.

Subfamily GONATOCERINÆ.

GONATOCERUS EXIMIUS, new species.

Female.—Length 0.7 to 0.8 mm. In Girault's diagnostic table of the species of this genus¹ this species runs to section II, but apparently differs from both species included in that section in having the ovipositor much longer, it being exerted at least three-fourths the length of the abdomen and in some cases longer than the abdomen.

Antennæ 11-jointed, longer than the body; the scape extending above the vertex, slightly swollen below and toward the apex; pedicel about as long as broad, much broader than the first funicle joint and scarcely as long; joint 4 of the funicle slightly the longest of the funicle joints; club solid and slightly longer than the two last funicle joints combined.

Head and thorax under high magnification with faint reticulate sculpture; abdomen sessile, a little longer than the thorax, strongly compressed from the sides for its whole length, viewed from the side ovate; the ovipositor slender, strongly exerted, extending beyond the apex of abdomen nearly or quite the length of the abdomen.

Forewing oar-shaped, very slightly and uniformly infumated, the venation ending at about the basal one-third of the wing; marginal vein very slightly obliqued into the wing at apex; discal cilia moderately coarse, and not arranged in definite rows; marginal cilia moderately long, the longest about equal to half the greatest breadth of the wings; longest marginal cilia of the hind wings at least four times as long as the width of the wing, those on the anterior margin about half as long as those on the posterior margin. Hind tarsi much shorter than their tibiæ, the basal tarsal joint about one and one-half times the length of the second.

Head, thorax, and abdomen black, the latter at base and extreme apex pale testaceous. Antennæ brownish black, the scape at base and below more or less pallid; legs, including all coxæ, pale brownish-yellow, the femoræ in some specimens dark brown medially; ovipositor sheaths black.

Male unknown.

Type-locality.—Orlando, Florida.

Type.—Cat. No. 16360, U.S.N.M.

¹ Proc. Amer. Ent. Soc., vol. 37, p. 273.

Four tag-mounted specimens from the type-locality reared by G. G. Ainslie from Jassid eggs and recorded under Webster No. 8381 C, Bureau of Entomology, United States Department of Agriculture.

Superfamily PROCTOTRYPOIDEA.

Family SCELIONIDÆ.

Subfamily TELENOMINÆ.

EUMICROSOMA, new genus.

Head transverse, as wide as the thorax; occiput triangularly concave, lateral ocelli close to but not touching the eye-margin; from in front the head is distinctly broader than long dorso-ventrally, the face broad and nearly flat; antennæ inserted at the mouth with a small toothlike process separating them at the bases, 11-jointed and distinctly clavate in the female, in the male 12-jointed and submoniliform. Thorax widest at the shoulders, tapering gradually posteriorly; prothorax concealed from above; mesoscutum rounded in front, only a little convex, and without parapsidal grooves; mesoscutellum flat, transverse; postscutellum unarmed, flat, separated from the scutellum by a curved row of punctures; propodeum short, truncate behind, with a median longitudinal carina and a transverse carina bounding the truncature above, laterally on the dorsum deeply striate, medially on either side of the median carina nearly smooth; lateral angles of the propodeum rounded. Forewings narrow, with marginal cilia longer than the width of the wing; marginal vein close to the costa, and nearly as long as the submarginal, extending beyond the middle of the wings; stigmal vein short, appearing as a continuation of the marginal and only very slightly oblique, its apex scarcely thickened; postmarginal obsolete; discal cilia of the forewings irregularly placed. Posterior wings linear, with long marginal cilia. Abdomen elliptical, not wider than the thorax, flattened above, the lateral margins not acute; first segment broader than long; second segment very long, extending almost to the apex of the abdomen, its apex rounded; ovipositor concealed or exerted not more than one-fourth the length of the abdomen.

Type.—*Eumicrosoma benefica*, new species.

This genus runs to *Typhodytes* in J. J. Keiffer's key to the *Telenominæ*,¹ but is readily separated from that genus by antennal and venational characters.

EUMICROSOMA BENEFICA, new species.

Plate 39, fig. 3.

Female.—Length 0.75 mm. Head from above more than twice as broad as long antero-posteriorly, the vertex faintly sculptured, face

¹ Wytsman's Genera Insectorum, Fascicule 80 B, 1900, p. 105.

perfectly smooth and polished, the region below the eyes faintly punctured; antennal scape not quite reaching the front ocellus; pedicel longer than joints 1 and 2 of the funicle combined; funicle five-jointed, the joints subequal, not longer than broad; club four-jointed, joint 1 much longer than the last funicle joint, but smaller than the following club joints, which are equal and subquadrate. Mesoscutum faintly reticulated anteriorly, the disk perfectly smooth and highly polished with a very few small round punctures; scutellum, postscutellum, and true metanotum smooth, without punctures; propodeum as described; anterior margin of the forewing to the apex of the venation with only a few short marginal cilia, beyond with long cilia, the longest being twice the width of the wing. First segment of the abdomen nearly twice as broad as long, with coarse longitudinal striæ, second segment similarly striate at base and much more faintly so beyond to the apex.

Head and thorax shining black. Antennæ, palpi, legs, including coxæ, and the whole abdomen reddish yellow. Antennal pedicel and club slightly fuscous.

Male.—Antennæ fuscous, submoniliform, without a distinct club; pedicel globose, thicker but not longer than the first funicle joint; funicle joints 1, 2, and 3 slightly larger than the following; apical joint of the club as long as the two preceding joints combined; abdomen a little shorter than in the female and distinctly fuscous on the apical half. Otherwise like the female.

Type-locality.—Manhattan, Kansas.

Type.—Cat. No. 16361, U.S.N.M.

Host.—*Blissus leucopterus*.

Described from over 40 specimens received from J. W. McCulloch and reared by him from the eggs of the Chinch Bug.

EXPLANATION OF PLATE 39.

- Fig. 1. *Euphoriana uniformis*, female.
2. *Elasmus apanteli*, hind tibiæ of.
3. *Eumicrosoma benefica*, female.

